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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/028,726	02/24/98	JOKIMIES	M 297-007856-U

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EXAMINER

APPIAH, C

ART UNIT

PAPER NUMBER

2745

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/028,726

Applicant

Jokimies

Examiner

Charles Applah

Group Art Unit

2745



☒ Responsive to communication(s) filed on Feb 24, 1998

☐ This action is FINAL.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire three month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

☒ Claim(s) 1-10 is/are pending in the application

Of the above, claim(s) _____ is/are withdrawn from consideration

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-10 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☒ received.

☐ received in Application No. (Series Code/Serial Number) _____

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 3, 4 and 5

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

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DETAILED ACTION

Claim Objections

1. Claims 1, 4 and 6 are objected to because of the following informalities: It appears the word "favour" should be changed to "favor" in the claims. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

3. Claims 1-4, 6 and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Wang et al. (5,649,289).

With respect to claims 1, 4 and 6 Wang teaches a cellular system, a cellular terminal and a method for realizing cell prioritizing that comprises terminals, cells and stationary network equipment (see FIG. 1) in which with regard to setting up and maintaining radio communications with base stations in the cells at least one terminal is arranged to favor at least one cell with respect to other cells independent of the other terminals (see col. 4, lines 32-45).

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With respect to claim 2, Wang further teach that the stationary network equipment comprises a database for storing cell priority data relating to individual terminals (CPA data for each MSU is stored in the memory of the system controller . . . , see col. 4, lines 33-45).

With respect to claims 3 and 7, Wang further disclose that the stationary network equipment is arranged to supply information to the terminal about priority data relating to the terminal, as a response to one of the following: the terminal registers with the cellular radio system, the terminal's location data changes in the cellular radio system, the priority data in the database is altered, a predetermined time has passed since the previous message to the terminal, which contained priority data relating to the terminal (see col. 4, line 46 to col. 5, line 6).

4. Claims 1-4, 6 and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by **Takahashi et al. (5,854,980)**.

With respect to claims 1, 4 and 6, Takahashi disclose (with reference to FIG. 15), a cellular radio system and a method for realizing cell prioritizing that comprise terminals (MS1-MS4) and stationary network equipment (NW, CS and BS1-BS3) in which the terminals are arranged to set up and maintain radio communications with base stations in the cells (E1-E3), characterized in that regarding the setting up and maintaining of radio communication, at least one terminal is arranged to favor at least one cell with respect to the other cells by utilizing priority data relating to that terminal in a manner independent of other terminals (by being connected with the base station in a home area, through selection of the system identification number stored in the memory, the radio communication apparatus appears to be favoring the home area cell, see col. 1,

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line 66 to col. 2, line 19 and col. 14, lines 1-32). Thus Takahashi appears to read on the invention as claimed.

With respect to claim 2, Takahashi further teach inherently that the stationary equipment comprises a database for storing cell priority data relating to individual terminals (see col. 4, lines 10-43). It is inherent that the system identification number transmitted from the base station is retrieved from a database attached to or in the base station.

With respect to claims 3 and 7, Takahashi further disclose that the stationary network equipment is arranged to supply information to the terminal about priority data relating to the terminal, as a response to one of the following: the terminal registers with the cellular radio system, the terminal's location data changes in the cellular radio system, the priority data in the database is altered, a predetermined time has passed since the previous message to the terminal, which contained priority data relating to the terminal (see col. 4, lines 30-65).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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6. Claims 5 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Wang et al.**, as applied to claims 4 and 6 above.

With respect to claims 5 and 8, Wang teaches everything as applied to claims 4 and 6 above. Wang further teaches the use of a usage index in determining cells which are considered part of a preferred list for a customer paging area for a mobile subscriber (see col. 5, lines 35-67). Wang fails to specifically teach the terminal being arranged to maintain a list of possible cells for cell reselection in an order which is based on a parameter calculated for each cell in which for priority cells it is arranged to alter the parameter calculation relating to the cell so that the parameter gets a particularly advantageous value in the case of a priority cell. However, it is very well known in the art to use certain defined parameters in maintaining cell reselection data to favor priority cells as taught by Wang. It would therefore have been obvious to one of ordinary skill in the art to combine the teaching of Wang with the system of Takahashi for the benefit of ensuring the selection of priority cells for communication in order to reduce charges for mobile subscribers.

7. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al., as applied to claim 8 above, and further in view of **ETSI (European Telecommunications Standards Institute), ETS 300 535 (GSM 03.22 version 4.10.0)**.

With respect to claims 9 and 10, Wang further teach priority data relating to a terminal includes at least the priority cell identity (see FIG. 2). However, Wang fails to specifically teach information as to whether or not the terminal shall apply an offset parameter, a delay factor

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relating to the cell and cell reselection hysteresis in the calculation of the parameter relating to a priority cell in a situation where cell reselection represents shifting from a non-priority cell to a priority cell.

However, it is known in the art to use cell reselection hysteresis and the use of a delay factor in calculating parameters relating to cell re-selection as taught by GSM 03.22 version 4.10.0. The specification teaches that for cell reselection in cell prioritization a hysteresis factor as well as an offset value can be used in determining a parameter (C2) (see sections 3.4- 3.5.2.2)

It would therefore have been obvious to one of ordinary skill in the art to use a delay factor and cell reselection hysteresis in making decisions regarding movement to and from priority cells as desired for the benefit of encouraging or discouraging reselection of specific prioritized cells.

8. Claims 5 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Takahashi et al.** as applied to claims 4 and 6 above, and further in view of **Wang et al. (5,649,289)**.

With respect to claims 5 and 8, Takahashi fails to specifically teach the terminal being arranged to maintain a list of possible cells for cell reselection in an order which is based on a parameter calculated for each cell in which for priority cells it is arranged to alter the parameter calculation relating to the cell so that the parameter gets a particularly advantageous value in the case of a priority cell. However, it is very well known in the art to use certain defined parameters in maintaining cell reselection data to favor priority cells as taught by Wang. Wang teaches the use of a usage index in determining cells which are considered part of a preferred list for a customer paging area for a mobile subscriber (see col. 5, lines 35-67). It would therefore have

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been obvious to one of ordinary skill in the art to combine the teaching of Wang with the system of Takahashi for the benefit of ensuring the selection of priority cells for communication in order to reduce charges for mobile subscribers.

9. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Takahashi et al.**, and **Wang et al.** as applied to claim 8 above, and further in view of **Lindroth (5,966,668)**.

Regarding claims 9 and 10, Wang further teach priority data relating to a terminal includes at least the priority cell identity (see FIG. 2). However, the combination of Takahashi and Wang fails to specifically teach information about the fact whether or not the terminal shall apply an offset parameter, a delay factor relating to the cell and cell reselection hysteresis in the calculation of the parameter relating to a priority cell in a situation where cell reselection represents shifting from a non-priority cell to a priority cell.

However, it is known in the art to use cell reselection hysteresis and the use of a delay factor in calculating parameters relating to cell re-selection as taught by Lindroth. Lindroth teaches that in cell prioritization a hysteresis factor can be used in determining which channel (cell) to lock on to (see col. 8, lines 26-55).

It would therefore have been obvious to one of ordinary skill in the art to use a delay factor and cell reselection hysteresis in making decisions regarding movement to and from priority cells as desired for the benefit of ensuring that back-up cells are provided in providing different levels of service as well as well as ensure good signal quality.

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Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Raith et al. (5,353,332 and 5,603,081), teach wireless communication.

Bodin et al. (5,301,356), Sicher (5,570,411), Solondz (5,615,249), Barber et al. (5,784,693) and English (5,870,674), all teach preferred system selection and prioritization in cellular communications.

Zicker (5,159,625), disclose the use of a default selection process in selecting a cellular system.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles Appiah whose telephone number is (703) 305-4772. The examiner can normally be reached on M-F from 7:30AM to 5:00PM.

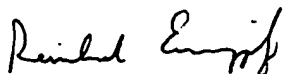
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Reinhard J. Eisenzopf, can be reached on (703) 305-4711.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900. The Group fax number is (703) 305-9508.

Serial Number: 09/028,726

CA
Charles Appiah

January 3, 2000.


REINHARD J. EISENZOPF 1-14-00
SUPERVISORY PATENT EXAMINER
GROUP 2700